

WHAT IS CLAIMED IS:

1. A device comprising:

a power plane, the power plane comprising a power pad to receive a first terminal of a circuit element;

5 a ground pad to receive a second terminal of a circuit element;

a via area substantially coplanar with the ground pad, separated from the ground pad, and electrically coupled to the ground pad;

a ground plane; and

a via to electrically couple the via area to the ground plane.

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2. A device according to Claim 1,

wherein the circuit element is a capacitor.

3. A device according to Claim 1, further comprising:

15 an interface to receive an integrated circuit.

4. A device according to Claim 1, further comprising:

an interface to interface with a socket.

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5. A device according to Claim 1, further comprising:

an interface to interface with a circuit board.

6. A device according to Claim 1, wherein the ground pad and the power plane are substantially coplanar.

7. A method comprising:

5 fabricating a ground plane;

fabricating a via electrically coupled to the ground plane;

fabricating a ground pad to receive a first terminal of a circuit element and a via area substantially coplanar with the ground pad, the via area electrically coupled to the via, separated from the ground pad, and electrically coupled to the ground pad; and

10 fabricating a power plane, the power plane comprising a power pad to receive a first terminal of the circuit element.

8. A method according to Claim 7, further comprising:

fabricating an interface to receive an integrated circuit.

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9. A method according to Claim 7, further comprising:

fabricating an interface to interface with a socket.

10. A method according to Claim 7, wherein the ground pad and the power plane  
20 are substantially coplanar.

11. A device comprising:

a first conductive plane electrically coupled to a first terminal associated with a first polarity and a second terminal associated with the first polarity;

a second conductive plane electrically coupled to a third terminal associated with a second polarity; and

a dielectric disposed between the first conductive plane and the second conductive plane,

5 wherein a first capacitance is present between the first terminal and the third terminal,

wherein a second capacitance is present between the second terminal and the third terminal, and

10 wherein the first capacitance and the second capacitance are substantially dissimilar.

12. A device according to Claim 11, wherein the second conductive plane is electrically coupled to a fourth terminal associated with the second polarity,

15 wherein a third capacitance is present between the first terminal and the fourth terminal,

wherein a fourth capacitance is present between the second terminal and the fourth terminal, and

20 wherein the third capacitance and the fourth capacitance are substantially dissimilar.

13. A device comprising:

a first  $n$  conductive planes, wherein  $n > 1$ ;

a second  $n$  conductive planes, each of the second  $n$  conductive planes separated from at least one of the first  $n$  conductive planes by a dielectric material;

25 a first terminal electrically coupled to  $w$  of the first  $n$  conductive planes, wherein  $1 < w < n+1$ ; and

a second terminal electrically coupled to  $x$  of the second  $n$  conductive planes,  
wherein  $0 < x < w$ .

14. A device according to Claim 13, further comprising:

5 a third terminal electrically coupled to  $y$  of the first  $n$  conductive planes, wherein  
 $0 < y < w$ ; and

a fourth terminal electrically coupled to  $z$  of the second  $n$  conductive planes,  
wherein  $x < z < n+1$ .

10 15. A device according to Claim 14, wherein  $w = z$  and  $x = y$ .

16. A device according to Claim 14, wherein  $w = z$  and  $x < y$ .

17. A device according to Claim 14, further comprising:

15 a package, the first terminal, the second terminal, the third terminal and the fourth  
terminal extending from a lower surface of the package;

a fifth terminal electrically coupled to the  $w$  first conductive planes;

a sixth terminal electrically coupled to the  $z$  second conductive planes;

20 a seventh terminal electrically coupled to  $y$  of the first conductive planes, the  
planes electrically coupled to the seventh terminal being different from the planes  
electrically coupled to the third terminal; and

a eighth terminal electrically coupled to  $x$  of the second conductive planes, the  
planes electrically coupled to the eighth terminal being different from the planes  
electrically coupled to the second terminal,

25 wherein the fifth terminal, the sixth terminal, the seventh terminal and the eighth  
terminal extend from an upper surface of the package.

18. A device according to Claim 14, further comprising:

a package, the first terminal, the second terminal, the third terminal and the fourth terminal extending from a lower surface of the package;

5 a fifth terminal electrically coupled to the w first conductive planes;

a sixth terminal electrically coupled to the z second conductive planes;

a seventh terminal electrically coupled to x of the first conductive planes, the planes electrically coupled to the seventh terminal being different from the planes electrically coupled to the third terminal; and

10 a eighth terminal electrically coupled to y of the second conductive planes, the planes electrically coupled to the eighth terminal being different from the planes electrically coupled to the second terminal,

wherein the fifth terminal, the sixth terminal, the seventh terminal and the eighth terminal extend from an upper surface of the package.

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19. A device according to Claim 14, further comprising:

a package, the first terminal, the second terminal, the third terminal and the fourth terminal extending from a lower surface of the package;

a fifth terminal electrically coupled to the w first conductive planes;

20 a sixth terminal electrically coupled to the z second conductive planes;

a seventh terminal electrically coupled to the y first conductive planes; and

a eighth terminal electrically coupled to the x second conductive planes,

wherein the fifth terminal, the sixth terminal, the seventh terminal and the eighth terminal extend from an upper surface of the package.

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20. A device comprising:

a first conductive plane, the first conductive plane comprising a first portion and a second portion, the first portion discontinuous from the second portion;

a second conductive plane, the second conductive plane comprising a third  
5 portion and a fourth portion, the third portion discontinuous from the fourth portion; and

a dielectric disposed between the first portion of the first conductive plane and the third portion of the second conductive plane.

21. A device according to Claim 20, the dielectric disposed between the second  
10 portion of the first conductive plane and the fourth portion of the second conductive plane.

22. A device according to Claim 20, further comprising:

a second dielectric disposed between the second portion of the first conductive  
15 plane and the fourth portion of the second conductive plane.

23. A device according to Claim 20, wherein the first portion of the first conductive plane defines a first interface to couple the first portion to a first terminal associated with a first polarity, and

20 wherein the third portion of the second conductive plane defines a second interface to couple the third portion to a second terminal associated with a second polarity.

24. A device according to Claim 23, wherein the second portion of the first  
25 conductive plane defines a third interface to couple the second portion to a third terminal associated with the first polarity, and

wherein the fourth portion of the second conductive plane defines a fourth interface to couple the fourth portion to a fourth terminal associated with the second polarity.

5           25. A device according to Claim 23, wherein the first portion of the first conductive plane defines a third interface to couple the first portion to a third terminal associated with the first polarity, and

              wherein the third portion of the second conductive plane defines a fourth interface to couple the third portion to a fourth terminal associated with the second  
10   polarity.

26. A system comprising:

a microprocessor;

a package coupled to the microprocessor, the package comprising:

15           a circuit element comprising a first conductive plane electrically coupled to a first terminal associated with a first polarity and a second terminal associated with the first polarity, a second conductive plane electrically coupled to a third terminal associated with a second polarity, and a dielectric disposed between the first conductive plane and the second conductive plane; and

20           a double data rate memory coupled to the package,

              wherein a first capacitance is present between the first terminal and the third terminal,

              wherein a second capacitance is present between the second terminal and the third terminal, and

25           wherein the first capacitance and the second capacitance are substantially dissimilar.

27. A system according to Claim 26, further comprising:  
a motherboard coupled to the package and to the double data rate memory,  
wherein the circuit element is to reduce resonance between the package and the  
5 motherboard.